

## Immunization for Individuals with Inadequate Immunization Records

**Revision Date: August 30, 2018**

Immunization status is determined by documentation of previous immunization (i.e., immunization record) or, in some cases, proof of having had the disease (i.e., laboratory confirmation). Individuals without written documentation of immunization or lab confirmation of having had the disease should be offered age-appropriate immunization according to the routine immunization schedule for their age.<sup>1</sup>

### • General Guidelines

- While written or electronic documentation of immunization is preferable, in some instances information by telephone from the individual's health care provider with the exact dates of immunization may be acceptable for immunization assessment.<sup>1</sup>
- For children, parental recall of prior immunization, in the absence of documentation from the vaccine provider, correlates poorly with vaccines received and should not be accepted as evidence of immunization. One possible exception is seasonal influenza vaccine, due to the increased reliability of recall as to whether or not influenza was received less than one year previously.<sup>1</sup>

### • Serologic Testing for Individuals without Records

- Routine serologic testing to determine immunity of individuals without written records is generally not practical<sup>1</sup> and is not recommended. Individuals without immunization documentation should be considered unimmunized and started on an immunization schedule appropriate for their age and risk factors.<sup>1</sup>
- Disease does not always confer immunity, and routine immunization should continue following the infection for some vaccine-preventable diseases. See table below:

**Determination of Immune Status and Previous Disease in Individuals reporting disease history<sup>1,2</sup>**

Disease	Immunity from previous disease (Laboratory confirmed disease)	Laboratory confirmation of immunity	Immunization recommended
Diphtheria/Tetanus	Disease does not always result in immunity.	Not recommended.	Yes
Pneumococcal	Disease does not always result in immunity or immunity against all vaccine-preventable serotypes.	Not applicable.	Yes
Polio	Disease does not always result in immunity or immunity against all vaccine-preventable serotypes.	Not applicable.	Yes
HIB	Disease may not induce immunity in children under 24 months.	Not applicable.	Yes
Pertussis	The duration of protection induced by pertussis infection is unknown.	Not applicable.	Yes
Measles	Yes	May be recommended in some situations	Yes, if other antigens in the MMR vaccine are needed.
Mumps	Yes	Not recommended.*	Yes, if other antigens in the MMR vaccine are needed.*
Rubella	Yes	May be recommended in some situations	Yes, if other antigens in the MMR vaccine are needed.
Hepatitis A	Yes	May be recommended in some situations	No, if anti-HAV IgG positive.
Hepatitis B	Yes	May be recommended in some situations	No, if anti-HBsAg or anti-HBc total positive Vaccine may be recommended in certain situations even if anti-HBsAb positive.
Meningococcal	Previous disease does not always result in immunity against all vaccine-preventable serotypes.	Not applicable.	Yes, if indicated as per individual's age or health history.
Varicella	Yes (only if laboratory confirmed).**	May be recommended in some situations.	No, if serology confirms varicella IgG positive.

\* **Mumps:** Positive mumps IgG serology following immunization does not necessarily confirm immunity. Mumps immunization is recommended.

\*\* **Varicella:** Due to the low incidence of disease following the implementation of varicella immunization programs verbal history is not a reliable indicator of immunity.<sup>6</sup> Individuals without evidence of immunity (i.e. 2 doses of varicella vaccine appropriately spaced or laboratory evidence of immunity or laboratory confirmation of disease) should be vaccinated with 2 doses of varicella vaccine.<sup>6</sup> When in doubt about previous disease of immunization status, an individual should be immunized.<sup>5</sup>

- **Risk of Adverse Events**

- Adverse effects of repeated immunization with the following vaccines have not been demonstrated: combined measles-mumps-rubella with or without varicella, inactivated polio, *Haemophilus influenzae* type b, meningococcal conjugate, hepatitis A, hepatitis B, univalent varicella, pneumococcal polysaccharide and influenza vaccines.<sup>1</sup>
- Individuals who develop a serious adverse local reaction after administration of tetanus-, diphtheria- or pertussis-containing vaccines should be individually assessed before they receive additional doses of these vaccines. The benefit of continuing the vaccine series needs to be weighed against the risk of further adverse reactions. Diphtheria and tetanus serology may be helpful in determining immune status and may guide the need for continued immunization.<sup>1</sup> There are no established serologic correlates for protection against pertussis.

See *Adverse Events Following Immunization: Interpretation of Diphtheria Antitoxin (DAT) and Tetanus Antitoxin (TAT) Levels* and *Adverse Events Following Immunization (AEFI), Policy for Alberta Immunization Providers*.<sup>3</sup>

- **Individuals New to Canada**

- Persons new to Canada lacking adequate documentation of immunization should be considered unimmunized and started on an immunization schedule appropriate for age or risk factors.<sup>1</sup>
- Immunization records available should be reviewed carefully and compared to Alberta immunization schedules. Any doses considered invalid should be repeated and additional vaccine doses should be administered to correct schedules in which an inadequate number of vaccine doses were administered.
- Immigration medical examinations do not routinely include a review of immunization status.<sup>1</sup>

### References

<sup>1</sup> National Advisory Committee on Immunization. (2018). *Canadian Immunization Guide* (evergreen ed.). Ottawa, ON: Public Health Agency of Canada. [www.canada.ca/en/public-health/services/canadian-immunization-guide.html](http://www.canada.ca/en/public-health/services/canadian-immunization-guide.html)

<sup>2</sup> American Academy of Pediatrics, Committee of Infectious Diseases. (2018). *Red Book: 2018-2021 Report of the Committee on Infectious Diseases* (31<sup>st</sup> ed.). In D. W. Kimberlin, M. T. Brady, M. A. Jackson & S.S. Long eds. Elk Grove Village, IL:

<sup>3</sup> Alberta Health. *Adverse Events Following Immunization (AEFI) Policy for Alberta Immunization Providers*. <https://open.alberta.ca/dataset/d86b52a9-45f4-4948-8a06-53b2c045135e/resource/7598f59a-3dfc-4c70-9065-c3bf5b4ee363/download/AIP-AEFI-Policy.pdf>.